

Application Number 10/511478
Response to the Office Action mailed October 26, 2009

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 1 and 5 have been amended. Claims 1, 3-8 are pending. Support for the amendment to claim 1 can be found in Figure 4 and on Page 3, Paragraph 0025, Ins. 19-29. Favorable reconsideration of this application is requested in view of the above amendments and the following remarks.

Objections

Applicants have amended claim 5 editorially. Applicants submit that Claim 5 is in proper form as a product by process claim, which is a well-recognized product claim format in U.S. practice. Withdrawal of the objection is requested.

Claim Rejections Under 35 USC § 103(a)

Claims 1, 3-5 are rejected as being unpatentable over Crowley (US Patent No. 5,715,825) in view of Abe (JP 20022078673). This rejection is traversed.

Claim 1 is directed to an ultrasonic probe having an elastic reserve tank and a grip portion wherein the wall of the elastic reserve tank is separate from the wall of the grip portion. Due to this configuration, a force applied to the wall of the grip portion will not be transferred to the wall of the elastic reserve tank (See Paragraph 0025). The elastic reserve tank can maintain the pressure and shape of the sound window without any external force being applied.

Nowhere does Crowley teach or suggest having such a separate reserve tank and grip portion. In the catheter sheath of Crowley, which is cited in the rejection as the counterpart of the elastic reserve tank, the wall of the elastic reserve tank is the same as the wall of the catheter sheath. This means that the catheter sheath 12 is the external wall of the catheter, and the inside of the catheter sheath 12 is charged with a sound propagation liquid. If the catheter sheath 12 has the functions of the reserve tank according to the present application, the catheter sheath would have to be elastic for absorbing changes in pressure of the sounds propagation liquid.

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However, Crowley teaches away from the catheter sheath being elastic. If the catheter sheath were to be elastic, it would be susceptible to pressure changes from the external environment such as contact with the arterial wall, blood pressure changes due the heart beating, or the user gripping the external surface of the catheter. These external forces would be transferred to the sound propagation liquid, a result that would not be desirable in Crowley. Therefore, unlike Claim 1, the configuration of the catheter in Crowley cannot provide the effect of absorbing the changes of pressure of the sound propagation liquid, thereby maintaining the pressure within the sound window. The addition of Abe, which is cited in the rejection for teaching a barrier layer on an internal wall surface of a sound window, does not cure this deficiency.

For at least these reasons claim 1 is not suggested by the combination of Crowley and Abe and should be allowed. Claims 3-8 depend from Claim 1 and should be allowed for at least the same reasons.

Applicants request an early allowance of this application. If there are any remaining issues that can be easily resolved with a telephone call, the Examiner is invited to call the attorney of record, Mr. Douglas P. Mueller at 612. 455.3804.



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Respectfully submitted,

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